

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-10 (cancelled)

11. (new) A process for production of a drop forged part made of a metal alloy containing 80 wt. % or more Ti and/or Zr and/or Hf, wherein the drop forged part during deforming is heated 5-15 K above the α / β phase boundary to form β phases and is subsequently cooled.

12. (new) A process according to Claim 11, wherein said drop forged part is a moving part of a motor.

13. (new) A process according to Claim 11, wherein said drop forged part is a connecting rod, crankshaft, camshaft or a valve.

14. (new) A process according to Claim 11, wherein the material is heated for 20-60 minutes.

15. (new) A process according to Claim 11, wherein the relaxation thermal treatment occurs at 600-700°C after cooling.

16. (new) A process according to Claim 11, wherein the E-modulus and the rigidity of the Ti and/or Zr and/or Hf containing materials, or alloys thereof, are increased.

17. (new) A process according to Claim 11, wherein the alloy is a titanium alloy containing 1-20 wt. % Zr and/or Hf and optionally incidental amounts of other light or heavy metals.

18. (new) A process according to Claim 11, wherein the alloy is a titanium alloy containing 5-15 wt. % Zr and/or Hf and optionally incidental amounts of other light or heavy metals.

19. (new) A process according to Claim 11, wherein the alloy is a titanium alloy containing 90 wt. % titanium.

20. (new) A process according to Claim 11, wherein the alloy is a titanium alloy selected from Ti Al 6 V 4 and Ti Al 6 Fe2 Si.

21. (new) A process according to Claim 11, wherein an α / β micro structure or composite material is formed.

22. (new) A process according to Claim 11, wherein the drop forge part after forging is slowly cooled in air.

23. (new) A drop forged part made of a metal alloy containing 80 wt. % or more Ti and/or Zr and/or Hf, made by a process comprising:

heating, during deforming, 5-15 K above the α / β phase boundary to form β phases; and
subsequently cooling.

24. (new) A drop forged part as in claim 23, wherein said part is a connecting rod, a crankshaft, a camshaft or a valve part.

25. (new) A drop forged part made of a metal alloy containing 80 wt. % or more Ti and/or Zr and/or Hf, made by a process comprising:

heating, during deforming, 5-15 K above the α / β phase boundary to form β phases; and
subsequently cooling in such a manner that the E-modulus is increased.